

OUTREACH EVENT REPORT AND RECOMMENDATIONS

Attendee's Name: Joseph Kerski Title: Cartographer, USGS

Location: Albuquerque NM

Other USGS Attendees: Bonnie Gallahan, Native American Liaison, USGS - FGDC

Event Date(s): 15-16 November 1999

Purpose of Event: Participate in GIS Satellite Broadcast to Native American tribal colleges and universities from Southwestern Indian Polytechnic Institute (SIPI).

Background:

Approximately three times per year, a satellite broadcast on GIS is conducted for all participating Native American tribal colleges and universities from SIPI. Participating universities access the broadcast via satellite from a signal broadcast from the Distance Learning Center of SIPI. The college also conducts numerous distance learning classes in this manner, including language and technical classes. I had the fascinating opportunity to sit in on a Choctaw Language class broadcast from the University of Oklahoma to several colleges, including SIPI, where 5 students are enrolled in the class.

The Southwestern Indian Polytechnic Institute is a BIA-supported, two-year institute of higher education located in Albuquerque, New Mexico, with an enrollment of nearly 700. Their www site is located at <http://www.sipi.bia.edu>.



Entrance to SIPI, Albuquerque, New Mexico.

Sponsors for this broadcast included:

- 1) Southwestern Indian Polytechnic Institute (SIPI)

- 2) Geographical Information System Program (GISP) (formerly NCRI)
- 3) Federal Geographic Data Committee (FGDC)
- 4) Intertribal GIS Council, Inc.



Some of the nearly 700 students enrolled at SIPI.



SIPI gymnasium and student center.



Satellite dish for GIS and other broadcasts.

My Activities at the Conference:

Bonnie Gallahan – Native American liaison, FGDC, and Sue Marcus, Native American liaison, USGS Directors Office, invited me to this broadcast and very generously paid for my travel to the event. It was a pleasure to work with them and to meet Bonnie at the broadcast. The facilities at the Distance Learning Center were exceptional, allowing the camera to focus on maps on the wall, documents in the presenter's hand, computer displays, or the presenter. Monte Monteith, Art, and Kim provided the technical support and were also excellent to work with, and very knowledgeable about the technical capabilities of the facility. Nadine Scala (SIPI) and Bonnie Gallahan coordinated the speakers for the conference.

My presentation focused on how and why Native American educators are using GIS in the curriculum to teach math, science, history, and geography. I highlighted some of the challenges and potential of using GIS in teaching from primary to university level. Many educators on tribal lands are finding that the use of GIS is a natural one, given the high level of connectedness to the earth that is a part of the culture and education in most tribal schools. It also provides a good connection to the community, a means of including field work in the curriculum, and an excellent school-to-career opportunity. Through GIS, students can work on projects using real-world data in an exciting new way, solving real-world problems in a team environment, simulating what occurs in the workplace. I showed the major USGS types of base geospatial data and described several projects taking place using GIS in education that I have been involved with, including a neighborhood analysis project, a natural hazards earthquake project, a regional geography project, a chemical spill analysis project, and a pollution land use project. I ended the presentation by highlighting the Internet/GIS Institute that I co-taught at Northern Arizona University in August 1999, through NAU's Environmental Education Outreach Program. See <http://jan.ucc.nau.edu/~man5/> for more information. This institute brought together 18 tribal environmental professionals and teachers from over a dozen tribal lands across the USA, including Nevada, Mississippi, Alaska, Washington, Arizona, New Mexico, and South Dakota. These participants are using GIS in a multimedia sense to preserve the native language, document land use change over time, monitor vegetation and land cover, analyze population patterns, and other exciting projects.



Dr. Carolyn Elgin, SIPI President.

Agenda:

Welcome & Introductions

Dr. Carolyn Elgin, President, SIPI

Opening Remarks

Pete Homer, President/CEO National Indian Business Association

Session I

The Business of GIS

Pete Homer, President/CEO National Indian Business Association

Session II

Orthophotography in Road System Development

Floyd Tortalita, GIS Specialist, Sandia Pueblo, Bernalillo, New Mexico

Session III

Using GIS in Education

Joseph Kerski, Geographer/Outreach, U.S. Geological Survey

Session IV

Native Allotment Mapping with GIS

Brenda Takes Horse, Tribal Liaison

Gail Walsh, GIS Specialist, BLM Alaska

Session V

Nuts & Bolts Resources for Creating a GIS Database

Jan Oliver, Physical Scientist, Technical Service Center, Bureau of Reclamation

Session VI

Local Tribal GIS Issues

Tribal Representative

11:40 - 11:52

Speakers Panel and Summary, Questions and Answers

11:52 - 11:54

Comments

Ben Niemann, President GIST Geographical Information System Program

11:54 - 11:56

Comments

Bonnie Gallahan, American Indian Liaison, Federal Geographic Data Committee

11:56 - 12:00

Announcements & Thank You
Dr. Carolyn Elgin

Recommendations:

This is one of the best outreach activities in which I have had the opportunity to participate. The broadcast went very smoothly without any major technical difficulties, thanks to the excellent support from Monte and the SIPI staff. This is a major undertaking, considering the broadcast is "live" and not from tape. We should definitely continue to support these types of endeavors. A satellite broadcast is a unique opportunity to share the work we've been doing and foster future work with data users of all types and from all organizations. For colleges that would like to view the broadcast at a later time, a videotape will be made, and the SIPI staff will send me a videotape which I will share with whomever is interested. Working with the FGDC will continue to be an important part of our mission. The tribal environmental and other tribal officials and educators are using GIS in a variety of fascinating ways. Working with the Native American community and the academic community continues to provide excellent two-way dialogue among the participating organizations, and provides potential future USGS or other natural resources employees who can contribute to the well-being of all people.

****end of report****